



Attorney Docket No. 2676-000013

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE  
BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES**

Group Art Unit:	2613	)	
Examiner:	Agustin Bello	)	
Applicants:	Ross Saunders	)	<b>Reply Brief</b>
Serial No.:	10/054,009	)	
Filed:	January 21, 2002	)	
Title:	Network Diagnostic Tool For An	)	
	Optical Transport Network	)	
		)	

---

**REPLY BRIEF ON BEHALF OF APPELLANTS**

This is a reply brief to the Examiner's Answer dated May 17, 2006, finally rejecting Claims 1-7, 9-31 and 33-36 of the present application.

### Arguments

I. Rejection of Claims 1-7 and 11-31 as being unpatentable over U.S. Patent No. 6,778,778 (Richards).

Applicant's invention is directed generally to a network diagnostic system for an optical transport network. The diagnostic system provides a cost effective mechanism for initiating diagnostic operations at different network elements of an optical network using a single connection to one of the network elements. In Richards, a diagnostic operation is only initiated at transmitter 12. Richards employs an overlay network to monitor performance at each of the optical network elements 56, 58, 60 as shown in Figure 1. Thus, Richards fails to teach or suggest a network diagnostic system where a diagnostic request is received at one network element in the optical network and transmitted over an optical supervisory channel to another network element in the optical network.

Accordingly, the Examiner must rely on a strained interpretation of Richards. Specifically, the Examiner is construing network 24 to be the second network element as recited in the pending claims. In this case, the network 24 must reside in (or be) an optical network as recited in the pending claims. In addition, the network 24 must be able to map a diagnostic request into an optical network frame and transmit the optical network frame over an optical supervisory channel of the optical network to another network element as recited in the pending claims.

The Examiner's arguments in support of this interpretation are flawed in several respects. First, the Examiner states "what's more is that higher speed Ethernet variants of today use fiber optical cable as a connection medium for transporting the Ethernet

frames.” The state of the art today is irrelevant. What is important is the state of the art prior to the filing of the present application and more importantly what is taught by Richards. Prior to the present application, Applicant contends that expensive overlay networks were employed for monitoring diagnostics in an optical network.

Second, the Examiner asserts that an optical interface is required for communication between the display device and the transmitter. On the contrary, a diagnostic request can be sent without passing into the optical domain (e.g., see col. 4, lines 48-50). Thus, operation of the transmitter is controlled in the electrical domain.

Finally, alternative embodiments suggested in column 6, lines 48-61 of Richards are meant to apply to the optical DWDM circuit 16, not network 24. None of the Examiner’s contentions, taken alone or in combination, require that a diagnostic request from the display device be converted to the optical domain prior to reaching the transmitter.

As previously discussed, Claim 1 recites a “second network element adapted to receive a request to initiate the network diagnostic operation from the network diagnostic device, [where] the second element operable to map the request into at least one optical network frame and transmit the optical network frame over an optical supervisory channel of the optical transport network to the first network element” in combination with other elements of the claim. Since this aspect of the present invention is not disclosed by Richards, it is respectfully submitted that Claim 1, along with the claims depending therefrom, defines patentable subject matter over Richards.

Applicant notes that independent Claim 21 recites subject matter similar to Claim 1, and thus should be allowable, along with claims depending therefrom, for the same

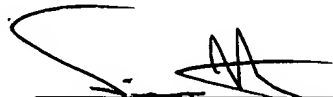
reasons as Claim 1. Accordingly, Applicant respectfully requests reconsideration and withdrawal of this rejection by the Board.

III. Rejection of Claim 34-36 as being unpatentable over Richards.

Claims 34-36 are directed generally to data records for communicating network performance data. In short, Applicant contends the teachings of this reference are insufficient to sustain this rejection without citations of further references or documentary evidence to support an assertion of common knowledge.

For the foregoing reasons, the appealed claims are patentably distinguishable over the art relied upon by the Examiner. Accordingly, Applicant's representative respectfully requests that this Board reverse the final rejection of Claims 1-7, 9-31 and 33-36.

Respectfully submitted,



---

Timothy D. MacIntyre  
Registration No. 42,824

Dated: July 17, 2006

HARNESS, DICKEY & PIERCE  
P.O.Box 828  
Troy, Michigan 48303  
(248) 641-1600

TDM/drl